1. Positional Login

1.1 Poslogin Overview

The Positional Login software layer provides UNIX session management, including a shift change capability and support of a single user ID.

1.1.1 Poslogin Operational Description

The User initiates a standard UNIX login. If the User has more than one available position, they will be prompted to choose one. The Xsession process is then started with an ownership of the ”chosen” position. The .xsession file is sourced in the positional and individual home directories. The User is logged in. Upon a successful ”Shift Change” the previous user will be logged off and the ”Shift Change” user will have system accountability. The platform will be ”deconfigured” at logout.

1.2 Positional Login Specifications

1.2.1 Positional Login Ground Rules

- Position UID’s do not have to equal Position GID’s.
- Positions, as defined in the /etc/passwd file, are NoLogin accounts.
- Users will be made members of appropriate position(s), other than their default position, by adding membership in the /etc/group file.
- Users will have a writeable .xsession-errors in their home directory.
- The X server will be initiated with access control disabled.
- Positional Login will be downloaded with the O.S..

1.2.2 Positional Login Functional Requirements

1.2.2.1 Pos-Login shall support the organization of user directories and software on a position or discipline basis.

1.2.2.2 Pos-Login shall support singular initialization of common applications and processes for all users within a common discipline or position.

1.2.2.3 Pos-Login shall provide controlled access to files and directories based on user’s position or discipline.

1.2.2.4 Pos-Login shall provide for the introduction of ”Group Administrators” for the purpose of positional or discipline owned file coordination.

1.2.2.5 Pos-Login shall be configured to support user authentication based on position or discipline.

1.2.2.6 Pos-Login shall be configured in a fashion to support user shift change without terminating applications or displays.

1.2.2.7 Pos-Login will be configured as to allow audit data to generate individual accountability for actions during a logged session.

1.2.2.8 Pos-Login will be configured to allow users who belong to more than 1 position or discipline to choose which position or discipline they wish to log into.

1.2.3 Positional Login Performance Requirements

Not Applicable.

1.2.4 Positional Login Interfaces

Pos-Login interfaces with the operating system login and session management, the user (login ID and password), Ops CM and provides the positional environment.

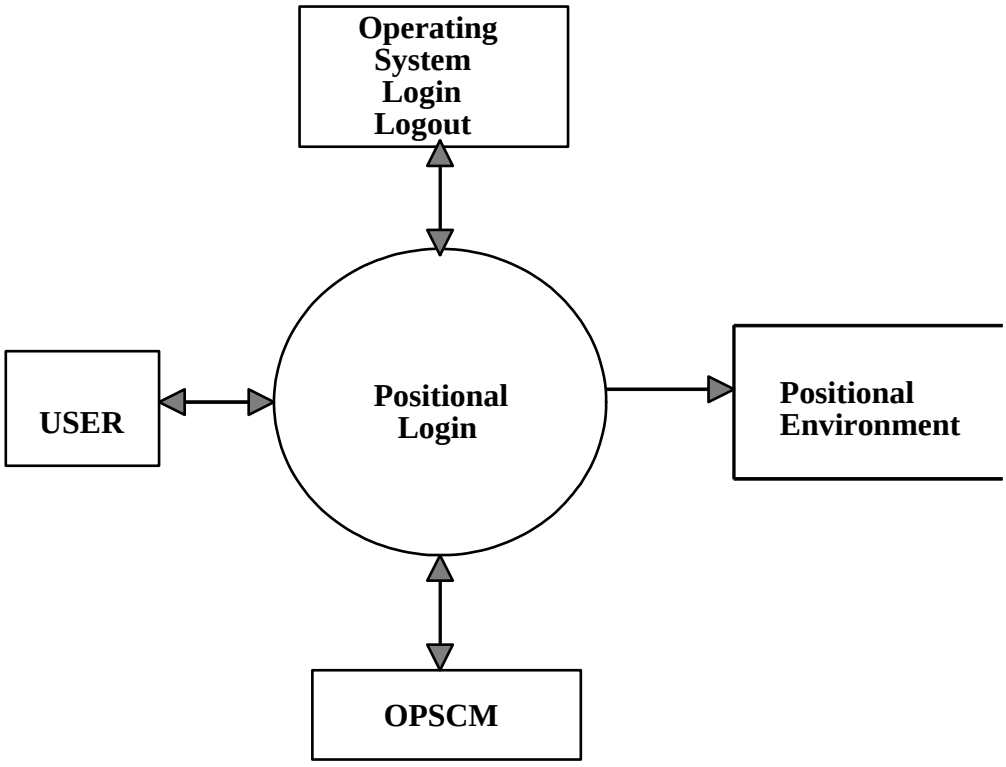

figure 1

1.3 Positional Login Specification

1.3.1 Positional Login Detailed Data Flow

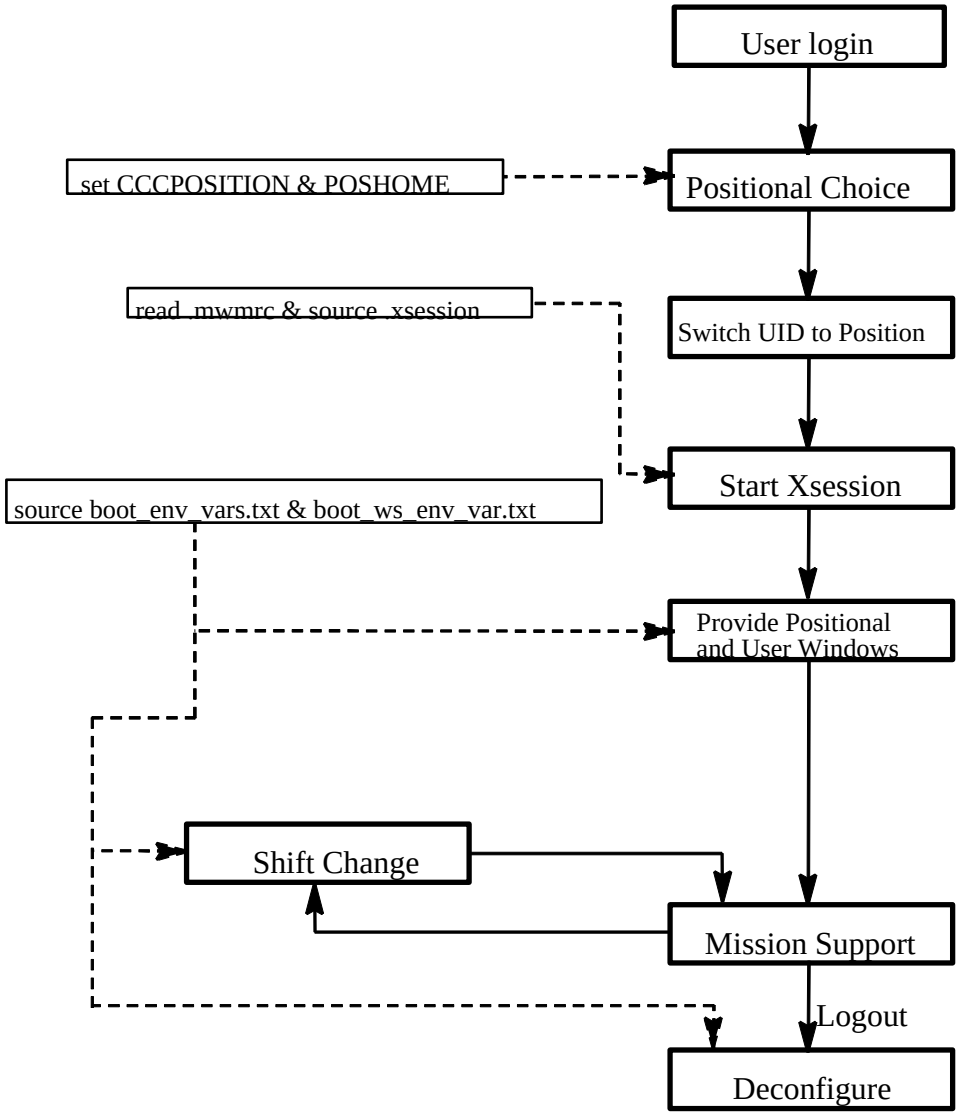

figure 2

1.3.2 Positional Login External Interfaces

1.3.2.1 System Messages

Not Applicable.

1.3.2.2 Display Formats

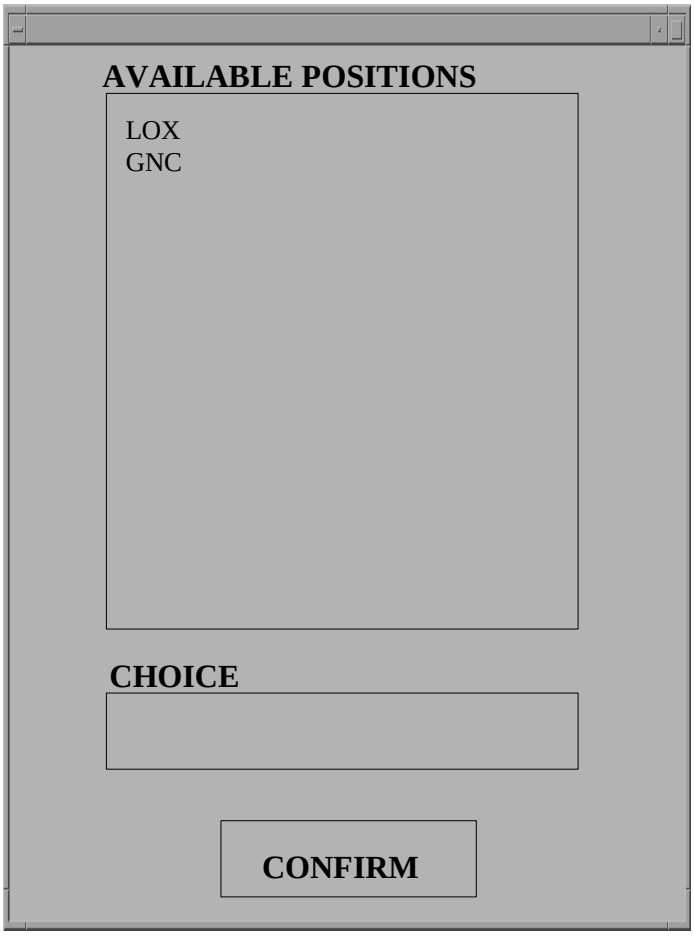

Figure 4 Positional Choice

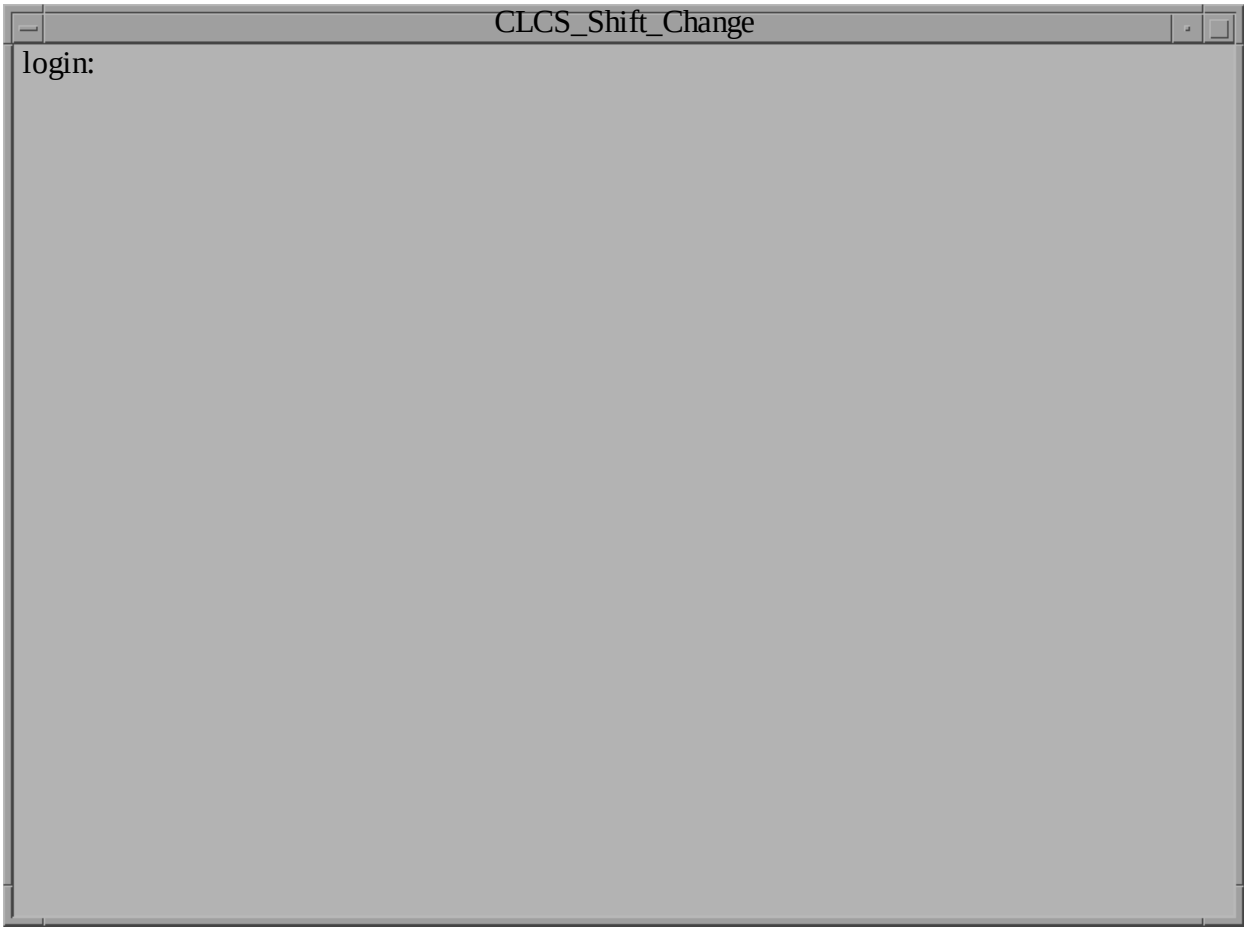

Figure 5 Shift Change

1.3.2.3 Input Formats

Not Applicable.

1.3.2.4 Printer Formats

Not Applicable.

1.3.2.5 Interprocess Communication

Not Applicable.

1.3.2.6 CSC External Interface Calls

Not Applicable.

1.3.2.7 Table Formats

Flat files, in /usr/local
discipline (currently set to position) ASCII
position (set to login position) ASCII
position_id (UID of position) INTEGER

poslogin (1 or 0) INTEGER
user_name (current user name) ASCII
user_id (UID of current user) INTEGER

1.3.3 Test Plan

Test Case Description: This test case verifies the major functionality of the positional login software.

1.3.3.1 Login with single available position.

Verify session ownership is users default position.
Verify user can pause and unpause the workstation.
Verify shift change capabilities

1.3.3.1 Login with multiple available positions.

Verify the user has an option as to which position to login with.
Verify session ownership is users ”chosen” position.
Verify user can pause and unpause the workstation.
Verify shift change capabilities